

5 HIGH THROUGHPUT PROPERTY TESTING OF MATERIALS
LIBRARIES USING RHEOLOGICAL DETERMINATIONS

ABSTRACT OF THE INVENTION

10 A high throughput method to determine an amount of a comonomer
in a copolymer sample of a copolymer system comprises the steps of
providing a plurality of copolymer samples; creating an array of the
copolymer samples; measuring a sample complex modulus of each of the
copolymer samples at a comparison phase angle; and determining the
amount of a comonomer in the copolymer sample by comparing the
15 sample complex modulus to a calibration curve, wherein the calibration
curve relates a concentration of the comonomer in the copolymer sample
to a complex moduli of the copolymer sample determined at the
comparison phase angle. A method of determining the amount of a
comonomer in both a single copolymer sample, and in a high throughput
20 scheme using the crossover modulus is also disclosed.